

THE A.P.R.O. BULLETIN

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TUCSON, ARIZONA

NOVEMBER-DECEMBER 1972

INCIDENT AT NOGALES, ARIZONA

THE FALTERSACK CASE

The September - October Bulletin carried details based on press reports of a car failure in southern Wisconsin (Page 7, column 3). Field Investigator Kathleen Salzwedel was asked to investigate and the following is supplementary information to the original report.

Greg Faltersack, 18, was driving home from his girlfriend's house at 2:30 a.m. Monday, August 21. He was proceeding east at 50 miles per hour on County Road JF between County Road F and Highway 164. The window on the driver's side was open and the radio was playing. He noticed no static. The engine suddenly cut off and there was a complete electrical failure. He hit the brakes, skidded about 23 feet, ending up on the left side of the road. The car, a 1963 Plymouth, had power steering and he was unable to control it.

Faltersack sat in the car recovering from the shock, then heard a ~~two-tone~~ electrical sound about an interval of a musical 4th of 5th apart, the higher one first, a slight pause between each.

He heard these sequences three times, then got out of the car, looked up and saw a round orange object which appeared to be 40-50 feet above the trees which were approximately 40-50 feet high. The object was at about 75 degrees elevation. As soon as he got out of the car the object began to move away and up, diminishing in size until it disappeared at an elevation of about 85 degrees. As the object moved away he heard a sound of rushing air.

Faltersack attempted to start his car and did so with difficulty. The lights, radio and horn didn't work and it was later discovered that all fuses had been blown. The temperature gauge showed that the engine was overheated.

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Von Braun Challenged By Mrs. Granchi

Famous German rocket expert Werner Von Braun visited Rio de Janeiro in early November and on the 12th held a Press Conference. He was in Brazil to attempt to sell his Fairchild satellites to the Brazilian government and most of the question - and - answer period was devoted to this.

Toward the end of the conference, however, the inevitable question about the existence of UFOs was brought up. The interviewers were Brazilians asking questions in Portuguese which were in turn interpreted by a professional and put to him in English. Von Braun then answered in English and his remarks were converted back to Portuguese for the crowd.

In answer to the question about UFOs, Von Braun stated that he had once read a report put out by Wright-Patterson Air Force Base in Dayton, Ohio, in which all but 3% of the reports were explained as misconceptions of ordinary objects, and atmospheric or astronomical phenomena. He concluded his statement by saying that the remaining 3% of the hard core reports were nothing more than hallucinations.

At this, Mrs. Granchi stood up and, addressing Von Braun, identified herself as an APRO Field Investigator, and asked Von Braun if he knew who Dr. J. Allen Hynek is, and he replied, "Yes," adding that Hynek is a highly respected scientist in his field. Mrs. Granchi then asked if Von Braun was aware that Dr. Hynek had recently written a book which disagreed with what he had just announced about UFOs. Von Braun responded that he did not know anything about the book.

Mrs. Granchi asked Von Braun if he was aware that an APRO UFO Symposium had been held at the

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In the early morning hours of August 20, 1972 a strange object was seen for a period of time over Nogales, Arizona, which is located on the border between the United States and Mexico. Several people saw the object, and have been interviewed, and it is quite likely that many others observed it. The case is being continued, but sufficient information is available at this time to present it here.

Mrs. Helen Sutherlin, a teacher in the public school system at Nogales, was awakened by an "unearthly howl" from her white Samoyed dog who was outside the house in the back patio. She laid in bed watching a strange bluish-silver light which illuminated the curtains of the bedroom window. The dog continued to howl so she went outside to see what was wrong.

Going through the kitchen, she reached the side door, stepped out, and was immediately aware of a peculiar droning sound which sounded as though it came from above and from some distance. When she looked up into the sky she saw an oval-shaped light source which appeared to be the source of a cone of bluish-silvery light which bathed the main section of the city. She described it as being like a flashlight shining down on the ground. It kept flashing on and off and the light from it gave cars and tops of houses a sort of iridescent glow as if they were themselves giving off the light.

Mrs. Sutherlin estimated that the light flashed on and off eight to ten times and that she watched it for approximately 30 minutes. Her dog had quieted down when she came out and she was able to observe it closely for that period of time. Although she cannot pinpoint the exact time, she said that the kitchen clock read 2:30 at one time when she glanced at it but does not know if she looked at

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time high and the organization realizes a gain of 50 new members each month at present. An article in the *Tucson Daily Citizen's* Saturday Magazine, "Ole," roused much interest in Arizona, and an up-coming Sunday Magazine feature story in a Phoenix paper should do much to keep that interest alive.

Although APRO continues to progress at a steady rate, we would like to suggest that members give *APRO Bulletin* subscriptions to interested friends and relatives for birthday and Christmas gifts. We find that people who receive the Bulletin in this manner almost always continue as members after their subscription expires.

Italian, Japanese Books

Mr. and Mrs. Lorenzen have been notified that their book, "UFOs The Whole Story" will be published in Japan by the Kadokawa Press in the near future. Also scheduled for foreign publication is "Flying Saucer Occupants" which has been purchased by the Armenia Editore Company of Milan, Italy.

Members in Italy and Japan can look forward to another book about UFOs in their native languages.

Press Reports

Some of the following reports are a bit out-dated but because of the interesting nature they are being included here.

March 15, 1970, *Borracha Island, Venezuela*. No size or shape was discerned by witnesses, but a very bright light plunged into the sea causing considerable alarm among fishermen in the area. An "ear-splitting sound" was heard as the object made contact with the water and it caused huge waves which rocked the fishing boats for several minutes.

August 9, 1971, *Belo Horizonte, Brazil*. Vicente Lopes Buono, pilot of the PP-DHU airplane traveling between Belo Horizonte and Uberaba, reported to airport authorities in Uberaba that "an apparatus like two basins, one on top of the other," had accompanied his plane for 20 minutes during the flight. A pilot for 24 years, Lopes Buono said that when he was 50 minutes out of Uberaba he spotted the object which was flying at an altitude of 2,400 meters (7,874 feet) and at a distance of about ten kilometers (6.2 miles). He also said that he tried in vain to contact the Brasilia Air Base and then called the Uberaba airport. The flight controller, Sgt. Falcao decided that Buono should reconnoiter the machine but each time he would try to approach it would

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Thank You

The Lorenzens, Mrs. Cooper and Mr. Greenwell would like to thank the many members who have sent Holiday Greetings or Christmas cards to APRO Headquarters. The thoughts are much appreciated and the Headquarters staff only wish that they could respond in kind; however, the 250-plus letters and cards received represent a tremendous number of man-hours if they were to attempt to answer all.

Suggestions

Mr. Alexander Keul, APRO's Representative in Austria, recently informed Headquarters that he is writing a brief description of APRO and its functions in German for dissemination among German-

speaking friends and colleagues who are interested in the UFO problem. He also ordered back issues of the Bulletin which contained information pertaining to UFO incidents in his country. The staff would like to suggest that members and representatives in countries where there is little or no literature available on the subject of UFOs, should do the same, thus acquainting more people with APRO and its goals.

Membership Continues To Climb

Despite the devastating effect of the Condon Committee report in 1969, interest in UFOs seems to have been revitalized in the past year. Inquiries pertaining to membership in APRO are at an all-

Nogales

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it when she came out of the house or when she re-entered it.

After the thirty-minute observation, the lights of Nogales suddenly went out and Mrs. Sutherlin became alarmed and went inside. During her interview with Mr. and Mrs. Lorenzen she said she was sure that many people had seen the object because before the power failure she had observed many lights turned on in previously dark houses in the area.

She returned to bed and did not attempt to observe any more.

Because of certain time elements in this case it is quite likely that Mrs. Sutherlin mis-read the clock because the power failure that she refers to took place at approximately 3:35 a.m.

Our second major witness is young (22 years of age) Marco Flores, part owner of the House and Cellar, a night club and restaurant for young people in Nogales.

At 1 a.m. in the morning of the 20th, he closed his business, then spent an hour working on the books so that he wouldn't get "behind in his work". At a little after 2 a.m. he went to an all night restaurant where he had breakfast and talked with friends. He left the restaurant shortly after 3 and drove to his apartment on Western Avenue. He then undressed and, sitting on the edge of his bed, was playing his guitar and looking out the window which faces southeast-east. It was approximately 3:20 or 3:30 by his estimate that his air conditioner and lights went off. Looking out the window he could see that all of Nogales, including Nogales, Sonora, Mexico, was in darkness.

At that time Marco heard a humming sound which seemed to be above his apartment and across Western Avenue he saw a lighted area approximately 1/4 mile in diameter. It appeared to be traveling from the north to the southwest.

At this point it is important to note that the screens on the apartments in that complex are mounted on the outside. The window was open, so Marco decided to unlatch the screen and go outside rather than stumble through the darkened house. When he got outside he looked up and over his apartment and saw a glowing round object encircled by a ring. Unfortunately Marco is color blind so he could



Brian James' Rendering of Flores Sighting

not give any description of the color of the object but he did say it appeared to be metallic and its glow reflected off the overcast sky. He estimated that it was traveling about 35 miles per hour, was at an altitude of approximately 200-300 feet, and that he watched it a good minute before it went out of sight behind a hill at the rear of his apartment. He noted that the lighted area across Western Avenue was traveling at the same rate of speed as the object itself and felt they were in some way connected. The city lights came back on after the object was out of sight.

Marco then went inside and debated as to whether he should report the object to the police. At approximately 10 minutes later he heard an explosion and the lights which had been dimming and brightening after the first power failure, went out and stayed out. Marco again went outside and this time saw a lighted area in the sky to the north by northeast (where the local power station is located), opposite from the direction in which the UFO had disappeared. He then called the local police and told them about the light in the north and they informed him that the power plant had "exploded". The next day he reported the object he had seen (he had hesitated the night before, afraid of the usual ridicule) and they said that he was the only one to report such an object.

The Nogales Herald carried a short one-inch story about Marco's sighting and then several people (including Mrs. Sutherlin) called to inform him that they had seen some-

thing strange that night, too.

Among others who observed something strange that same night was Mr. John Gleeson, an employee of the Telephone Company who had gotten up to leave for his ranch. He was going to his truck when the power failed and he noted a "ball of fire", which was his only description, in the sky in the southeast over town. He said he had made several trips to his pickup truck before leaving, and saw the ball of fire to the southwest during one of the trips and that the next time he left the house he heard the explosion. He headed his truck in the direction of the explosion and found that it was the power plant (straight south of his home) which was on fire.

Mrs. Consuelo Corrales, secretary of the Sacred Heart Parish in Nogales, was another witness. She said that her husband saw "something flashing" first, and woke her up. They looked out their bedroom window at what appeared to be a silver-colored rainbow or halo of light directly east and quite close to their house which lit up the surrounding terrain. At the same time they heard a buzzing sound which she described as a rising and falling "rrr - rrr - rrr", somewhat like a motor. The Corrales' first thought there was something wrong with the cooler on the house next door but it became louder and louder, and then suddenly died out.

After watching the light for some time the Corrales' heard an explosion, the light dimmed and began going on and off like a caution light. They then saw the light

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Nogales

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from the power plant explosion, very prominent in the northeast sky. The Corrales' stayed up and prepared coffee as Mr. Corrales had to go to work and they didn't attempt to observe further. Mr. Corrales is manager of the Chevrolet dealership in Nogales, Sonora.

Because the power plant explosion occurred at close to the time the object was seen by the observers, the Lorenzens decided to try to get at the cause of the power failure, and in the course of their investigation Mr. Lorenzen interviewed the manager of the Power Plant who said that they had eventually found that someone had poured inflammable fluid into the plant through a window and then something like a "Molotov cocktail" had been thrown in which exploded and started the fire. He also said that the arson was considered to be an act to cause diversion while a load of drugs was smuggled across the border from Mexico.

This, of course, cast a new light on the whole affair and the Lorenzens had to consider the possibility suggested by the plant manager that Mrs. Sutherlin had observed a helicopter ground-lighting the area while customs officials and police hunted for smugglers. The Lorenzens contacted the Nogales police who said they don't have a helicopter, then Border Patrol officials who suggested that we talk to U.S. Customs. Mr. Lorenzen eventually contacted the Tactical Information Program of U.S. Customs where he learned that that organization, which supervises air search, had only one aircraft and that it had not even been in the air on the morning of August 20.

In summation, considering the time elements involved, it appears that Mrs. Sutherlin observed an object ground-lighting the Nogales area sometime between 2:30 and 3:30, and it may well have been the object seen by Marco Flores at 3:30 a.m. from his apartment on Western Avenue. The object seen by Mrs. Sutherlin seemed to be quite high in the sky (80 degrees elevation) and lit up a large portion of the Nogales main city area (see drawing by Brian James), whereas the object seen by Marco was closer and the area it illuminated was considerably smaller. This might be accounted for by distance from the ground - i.e.,

the closer the object the shorter the cone of light and therefore the smaller the area of illumination.

Unless the investigators of the power plant explosion are concealing something or simply offering an explanation for something they can't explain, it does not seem likely that the object or objects seen by Marco, Mrs. Sutherlin, Mr. Gleeson and the Corrales' are connected to the power failure in any way, and the presence of the objects or objects just prior to the explosion at the power plant is pure coincidence.

For geographical locations pertinent to this case, see the map accompanying this article. The circled letters, A, B, C, D, E, F and G indicate the locations of (A) the power plant, (B) Gleeson's observation point, (C) Mrs. Sutherlin's location, (D) Marco Flores' apartment, (E) Western Avenue, (F) Corrales' home and (G) the U.S.-Mexico international border.

Brian James had rendered an excellent representation of the scene where Marco observed the object as well as the object itself. At press time we are awaiting the final drawing of Mrs. Sutherlin's sighting. Mr. James was put in touch with the witnesses and the drawings are executed according to their testimony.

Granchi

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University of Arizona in November of 1971, and that it consisted of an all-scientific panel. Von Braun admitted that he had not know of this either.

Von Braun finally admitted that he is not very up-to-date on the subject and that "maybe I should disqualify myself as a UFO expert."

The latter statement caused general laughter from the crowd and Mrs. Granchi retired from the conversation. Shortly after, the Associated Press correspondent approached Mrs. Granchi and asked many questions concerning APRO.

A few days later, Mr. and Mrs. Lorenzen were interviewed by United Press International at the request of *O Globo*, one of Rio de Janeiro's largest daily newspapers. A rather lengthy story went out on the international wire as a result.

Besides being a top-notch Field Investigator, Mrs. Granchi has proved her worth in the field of public relations in Brazil and all researchers should be grateful to her for laying to rest the old belief that because a man is an expert in his particular field of endeavor, he is automatically qualified to make expert statements on unrelated scientific problems with which he is unfamiliar.

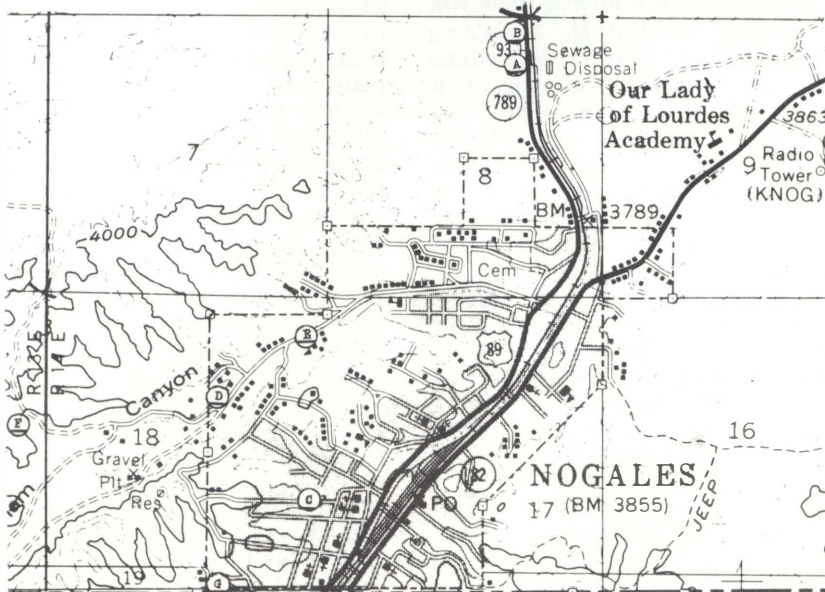
In Future Issues

The 1973 issues of the Bulletin will contain:

An occupant sighting from Indiana accompanied by illustrations by Staff Artist, Brian James.

A complete report on the South African sightings of June and July by Frank Morton, APRO's Representative for South Africa, including the results of his investigation in the landing of a UFO which damaged the asphalt surface of a tennis court.

More and detailed information on the Brazilian "flap" of 1972.



Faltersack

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Greg drove to his sister's home where he lives, woke her and they went back to the scene but saw nothing. They then notified the Waukesha County Sheriff's Department and deputies were dispatched to the location where they found skid marks where the car had stopped. They also verified that all the fuses in the car had been blown and that the engine was overheated. It was found that Faltersack had not been drinking and the investigating officers believed his story.

The sighting area: The location of the area where the object was sighted is a rather lonely stretch of road through a swampy area. There are trees on both sides of the road, about 40 feet in height and there are several houses a mile or so east of the location but none in the immediate vicinity. The Waukesha County Airport is three miles to the south. Interstate Highway 94 runs east and west about 2 1/2 miles south and the sighting area is just outside the suburbs of the city of Milwaukee and is mostly residential.

Environmental Factors: The sky was clear, moon and stars visible. The temperature was about 70 degrees after a very hot day, there was heavy dew on the ground. The weather was clear with ground fog starting in patches and there was no wind. The time was between 2 and 2:30 a.m. Central Daylight Savings Time. According to Faltersack, the moon was high in the southwest, full or nearly so, visible, no clouds in the vicinity. Many stars were visible.

There were no other cars on the road. After Faltersack arrived at his sister's house the lights were found to be functioning again.

In our preliminary report we noted that Greg had had trouble with engine overheating prior to the incident. He has had further trouble since the sighting, but noted that because of the overheating problem he checked the radiator frequently and added water. The temperature gauge on the dashboard which usually stabilized at 170-190 degrees had been stabilized before the sighting, according to Greg, but read 220 afterwards. However, Faltersack thinks the radiator trouble since the sighting might simply have been due to hot weather.

Other Details: The object seemed to disappear by moving straight up and away. There had been no light shining and no reflection on the road before the car stopped. The "electronic" sound came from above the car, ceased when he got out, whereupon the object began to get smaller and the rushing air sound was heard.

The object appeared to be about 2 feet in diameter at arm's length when first seen. When questioned on this point the witness said a circle one foot in diameter would not cover it. It appeared to be solid and not gaseous or nebulous and became dimmer as it moved up and away.

There is some disagreement concerning the apparent size. Greg said it did not move behind trees, nor were there any branches in front of it. However, the trees are close to both sides of the road and if the object appeared as large as he said it was, part of it should have been obliterated by tree branches.

The witness did not have any ill effects after the sighting. He felt shaky after the car stopped, and was frightened during the sighting. After observing the object he felt shaky and sat in his car for a few minutes before trying to start it. After a few minutes he noticed that mosquitoes were biting him which he said indicated the extent of his upset as he is extremely bothered by mosquitoes and would ordinarily notice them right away.

Greg Faltersack is the manager of a Kentucky Fried Chicken outlet in Milwaukee, Wisconsin, has a high school education. His vision is poor and he wears strong glasses at all times.

It has been found that the sister with whom Greg lives is a UFO enthusiast of the Adamski-contactee cult type and therefore Greg probably hears about the subject quite often. It was this sister who convinced Greg that he should report what he had seen, although he was reluctant to do so.

It was Mrs. Salzwedel's opinion that Greg is sincere, that he actually saw something and was quite upset and puzzled by his experience.

ADDRESS CHANGES

Always include old and new Zip Codes.

Press Reports

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maintain its distance. At this time it was 9 a.m., giving the pilot a good view of the object. While flying over the "Barragem do Estreito" at barely 10 kilometers from Uberaba the object suddenly streaked away and out of sight at a "dizzying speed". Lopes Buono told Sgt. Silvio Motta, commander of the Brazilian Air Force unit in Uberaba that he had "never seen anything like it in my entire career as a pilot". Thanks to Richard Heiden for this one.

May, 1972, off the coast of Chile. The Chilean trawler, "Doggenbank" and the fishing boat "Feliipe" were allegedly paced for five hours by a UFO which changed colors from bright blue to light green to orange-red. The object, according to Captain Morales of the fishing boat, suddenly "showed up" near them, and after fifteen minutes began changing colors. It then approached the ships at high speed making a "high-pitched hum" which terrified the crews, consisting of 35 men. The trawler was towing the fishing boat and the object kept them company at approximately 1,500 meters altitude (about 5,000 feet) until they reached the harbor, a period of about five hours. The report was made on May 2nd out of Valaparaíso, Chile.

May 27, 1972, Brazilia, Brazil. Although this does not consist of a press report, one of APRO's contacts in Brazil was informed that at 7 p.m. on this date a UFO was observed as it hovered about 30 meters (approximately 100 feet) over the Guards Battalion of the presidential military zone in Brazilia and was watched by all of the soldiers on duty. It was definitely an object and not just a light. We hope to obtain further information on this sighting.

Notice To All Field Investigators

The Recommended Procedures for APRO Field Investigators, recently published by APRO, was mailed to all active Field Investigators who received and returned a special form requesting a copy. If you are an active Field Investigator and if you did not return your form requesting a copy of the new manual (due, perhaps, to an oversight) you may do so now or at any time in the future. The manual is provided free of charge by APRO headquarters.

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Likewise, if there are any Field Investigators who were "overlooked" (i.e., they never received the special form, or returned the form but never received the manual) simply drop a line to APRO explaining the situation. Some Field Investigators who renew several months late may have this problem.

APRO's new Comprehensive UFO Sighting Report Form is also part of the new manual; in an emergency, Field Investigators may run Xerox copies from the original in the manual instead of waiting for additional copies from APRO Headquarters. All the above also applies to APRO Consultants and Representatives in foreign countries.



Book Review

UFOs: A Scientific Debate

by Carl Sagan and Thornton Page
Cornell University Press
296 pages, \$12.50

Review by Dr. John S. Derr
Martin Marietta Aerospace
Denver, Colorado
(Dr. Derr is APRO's Consultant in Seismology.)

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This is the book we've been waiting for, the somewhat augmented proceedings of the AAAS Symposium held in Boston, Massachusetts, on December 26 and 27, 1969. This was the first time that UFOs were the subject of a comprehensive scientific forum at a major scientific society. The agenda was the most comprehensive of any up to that time, following many approaches to understanding the subject. A great variety of explanations, hypotheses and attitudes were covered, ranging in one dimension from the honest astonishment of "We can't explain the residual unknowns" to the dogmatic "There are no residual unknowns." In another dimension, conclusions ranged from "The observations are real" to "Everyone is hallucinating, fabricating, or misinterpreting." Here at last is a responsible treatment of the UFO phenomenon in almost its full complexity, a study far more valuable than the *Condon Report*, and far less costly to the taxpayer to produce! This book belongs on the shelf of every serious student of UFOs, along with Hynek's *The UFO Experience*, the *Condon Report*, and the UFO Encounter cases published in *Astronautics and Aeronautics*.

With few exceptions, the book is most readable. The introduction,

a statement of background and philosophy, contains a summary of each paper, and also a summary of the cases referenced in the text. (A detailed summary of each paper, written by this reviewer, was printed in *The APRO Bulletin*, Nov.-Dec., 1969.) As the editors point out in the introduction, the value of the symposium lies in its "application of scientific thinking to problems of human interest." In this case, the power of the scientific method is used to confront unscientific claims and methods. Perhaps Walter Sullivan realized this best when he said, "I disagree with Dr. Condon, who vehemently opposed this symposium, because I feel that UFOs represent a human phenomenon that is far more important than any of us realize. Our attitudes and perceptions are conditioned to a degree far beyond our capabilities of direct observation." (p. 261)

Another way in which the symposium has great value is in the way it opens many new areas for fruitful legitimate scientific investigations. Examples are the search for Lilliputian stars or planets (Roach); sociological investigations such as popularized pseudo-science as a stimulus to study true scientific method (Page), or correlations of UFO reports with significant space achievements (Hartmann); Freudian aspects of UFO perceptions (Grinspoon and Persky); etc.

Still another value of the symposium is that its proceedings, this book, is a place where scientific papers on all aspects of the UFO subject are being published and will receive the circulation they deserve. The *Condon Report* was the first such collection. Before this, a few papers were published in the recognized journals (Hynek in *J. Opt. Soc. Am.* and Baker in *J. Astronaut. Scir.*, for example), but most were printed privately by the various UFO organizations and without the benefit of critical review. This book is clear evidence of this need, and the time has come for *Science*, official journal of the AAAS, to take over this function. The appearance of Bruce C. Murray's review in *Science* of Dr. Hynek's book is a welcome, encouraging sign that the editorial policy may be changing in the direction of being more open.

One purpose of the symposium was to remedy the lack of scientific

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communication in the field, which in Dr. Hartmann's view, "has allowed a distorted UFO mythology to develop." (p. 15) Ironically, those who criticize this mythology most are those who most effectively block communication! The result has been the evolution of UFO noise, which Dr. Hartmann predicted would reach a new peak coincident with the publication of pictures of Mars returned by Mariner 9. This lack of communication has prevented most scientists from seeing that the best unexplained cases, epitomized by the radar-visual cases, diverge radically from the popular concept of a "flying saucer." Thus, efforts to suppress investigation of UFOs are counterproductive: only open investigation and discussion can put the issue in proper perspective.

Although all the papers contribute to some phase of the discussion, there are certain key papers which can be divided into three groups: With respect to the extraterrestrial hypothesis (ETH), there are the believers, the non-believers and the methodical agnostics. J. Allen Hynek comes across as a believer, although he neatly ducks the issue by claiming he is a reporter. His paper is an introduction to his book, *The UFO Experience*, which has been well reviewed in various journals (B.C. Murray, *Science*, 177, 25 Aug. 1972, p. 688; P.E. McCarthy, *The APRO Bulletin*, May-June 1972, p. 6, etc.). On the subject of "science is not always what scientists do," he summarizes his criticism by saying he is "weary of pontification by those who have not done field, or home, work, so to speak." (p. 37) It will be clear to the reader that those who have done the most field and home work are also those most convinced of the validity of UFO study. For example, those who criticize his "strangeness-probability" table and are unable to see how it isolates the most important cases, clearly have not done their homework. Dr. Hynek's philosophy of science shows clearly in his quote from Goudge, which stresses the importance of leaving room in the establishment science for genuinely new empirical observations and new explanation schemes. He also quotes Schroedinger that a scientist must be curious, capable of being astonished, and eager to find out.

Evidently, the more most men become a part of the establishment the more they lose their ability to be true, objective scientists.

James E. McDonald's paper is most significant for its expression of the courage of his convictions and his willingness to take a stand. He blames the Air Force for a "grand foul-up", but not an intentional "grand cover-up". (p. 54) In his opinion, the Condon report is "quite inadequate", (p. 54) in part because the body of the report does not justify Dr. Condon's summary. In fact, he suggests "that there are enough significant unexplainable UFO reports within the *Condon Report* alone to document the need for a greatly increased level of scientific study of UFOs (p. 55) and he cites the specific cases he considers unexplained. His subsequent publication in *Astronautics and Aeronautics* (July 1971, pp. 66-70) of the facts of the South-Central U.S., July 17, 1957, case, and Gordon Thayer's account two months later (ibid, Sept. 1971, pp. 60-64) of the Lakenheath and Bentwaters RAF/USAF, England, August 13-14, 1956, case, have finally presented his challenge to the scientific community. These two cases, with Dr. McDonald's interpretation and criticism, are included in this book. They have not been explained, and in this reviewer's opinion, certainly cannot be until the scientific community takes his challenge seriously, if then. In view of this evidence, Dr. McDonald states unequivocally, "it is difficult for me to see any reasonable alternative to the hypothesis that something in the nature of extraterrestrial devices engaged in something in the nature of surveillance lies at the heart of the UFO problem." (McDonald's emphasis, p. 90)

Donald H. Menzel considers UFOs to be nothing more than a modern myth. His thesis is that people are receptive to the ETH because they aren't smart enough to figure out the real cause of a stimulus they report as a UFO. He notes that it is difficult to believe in UFOs when there are no genuine artifacts, a point certainly valid. On the other hand, his point about UFOs being unreal because they seem to disobey the laws of physics is not valid. To some observers, this may indeed appear to be the case, but as in his own example of meteors apparently moving upward with respect to the local horizon, observations under ad-

verse conditions are not capable of proving or disproving relationships to physical laws. Philip Morrison's comments on the human being as an observational instrument bear this out.

Dr. Menzel enjoys calling Drs. Hynek and McDonald's views "subjective", but the same can easily be said about his views, too. Undoubtedly he has solved many UFO cases, but he certainly can't claim to be scientific by giving a probable solution without thorough study first. The suggestion of a reasonable solution does not, in fact, solve a case! If Dr. McDonald erred, at least he erred on the side of scrupulous investigation and presentation of all the facts. If Dr. Menzel errs, it is in his having too much faith in the establishment, as indicated in his support of the Condon report as "unbiased". One suspects that he is saying that the report is unbiased because he is unbiased and agrees with it. If these two men were running for the office of district attorney, the choice would be obvious.

In the Washington National Airport case, for example, Dr. Menzel asserts that the radar anomalous propagation was caused by a marginal case of partial trapping, citing his wartime experience as proof. He may be correct, but he convinces no one because he refuses to perform the admittedly complex mathematical analysis his assertions require before they can be scientific proof. The reviewer's personal experience with one of his lectures confirms that he tends to talk down to his audience, vastly underestimating their ability to follow his arguments. The result is that he disappoints his audience without proving his case. In his appendix 5, he analyzes orthoteny rigorously and shows that the number of Michel's lines is completely predictable from purely random points. Dr. Menzel's statistics are quite convincing: if only he would devote himself as rigorously to the radar UFO problem, science might be advanced significantly.

In another of his valuable appendices, his description of the reports of the Zond IV reentry is a clear warning to investigators to be skeptical. It seems that perhaps any "fiery objects streaking across the sky, sending out showers of sparks, and leaving bright trails behind them," (p. 155) should be classified as meteors or re-

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entering spacecraft, no matter how many windows are observed or how low they are perceived! In this light, one can understand his skepticism concerning the Father Gill occupant case. Some will find his explanation as incredible as the reported sighting itself, but given the lack of independent investigation, the whole matter is inconclusive.

Dr. Menzel gives as one reason for debunking UFOs the idea that he doesn't want to encourage "pathological science," and cites various examples, such as N rays, which have been disproved. On the other hand, it is possible that pathological theories in science, like the effects of hysterical contagion described by Robert L. Hall (p. 216), will die of themselves in the proper time, but that theories which survive just may not be so pathological after all. One of his examples, blindfolded astronauts seeing flashes of light, which he attributes to normal physiological effects, has since been shown most probably to be due to cosmic rays. Microscopic cone-shaped indentations have been found in astronauts' helmets, indicating the stopping of heavy cosmic particles, and Cerenkov radiation, a well-understood source of light, would result from such particles traversing the eye at the proper velocity.

Dr. Menzel's arguments with Drs. Hynek and McDonald over what is or is not mirage, mistaken identification of conventional objects, anomalous propagation, etc., serve to eliminate much of the noise, and concentrate attention on what are the best cases, i.e., those whose study is most likely to uncover genuine new phenomena unknown to science. Science is most likely to be advanced by careful, unemotional, and critical examination of these cases, e.g., the radar-visual examples cited as appendices in Dr. McDonald's paper. Presumably Dr. Menzel has these cases in mind when he concludes that he "could advocate support of research in certain atmospheric phenomena associated with UFO reports." (p. 146) At last! After both sides have finished challenging each other's methods prejudices, and credibility, both are able to agree that further study of the truly puzzling atmospheric phenomena may yield valuable new scientific knowledge!

Those who debunk UFOs would do well to study the paper by Robert L. Hall on "*Sociological Perspectives on UFO Reports*." In Dr. Hall's view, some 'hard-core UFO cases . . . stand up better than many a court case,' (p. 219) a comment which leads into Dr. Morrison's ideas on the nature of physical evidence. Dr. Hall is clearly critical of the debunkers when he says, "Some skeptical scientists, faced with detailed reports by reliable witnesses, loudly and confidently assert interpretations which conflict strongly with available testimony and show a startling degree of disrespect for the reason and common sense of intelligent witnesses." (p. 218) The editors also noted this phenomenon in the introduction (p. XII): "The reader will occasionally find in these pages the heat of passion as well as the light of scientific inquiry." Dr. Hall is able to understand such attitudes, however because "scientists are human and behave according to the same principles of human behavior as nonscientists." (p. 220) His conclusion is definitely positive (p. 221): "The very strength of our resistance to the evidence on UFOs suggests to me that there is clearly a phenomenon of surpassing importance here." This importance may lie in the field of physical science, behavioral science, or both.

Frank D. Drake's comments on witnesses should be required reading for all UFO field investigators. His paper gives interesting insights into the operation of hoaxes and the degeneration of accuracy of testimony with time. Estimates of time duration seem to be accurate and lasting, but color perceptions are almost random, perhaps a result of different dark-adapted eyes seeing different colors when confronted with a bright stimulus. In his investigations, he observed an interesting phenomenon of a simultaneous sound like bacon frying attached to fireball sightings, which he hypothesized to result from feed-through from one perceptive center of the brain to another. The implications of his work are that, unless an observer records his experience almost immediately, much detail and accuracy will have been lost, but that some observers will have false perceptions regardless.

Carl Sagan's perspective of the subject makes him a mildly hostile agnostic. In his view, it is premature to say that interstellar

space flight is impossible, but, assuming that nothing can travel faster than the speed of light, it is highly unlikely. There isn't enough data on UFOs yet to make a good judgement, so one should keep an open mind. He considers the search for extraterrestrial intelligence to be very important, but thinks that UFO study is not the best approach. Rather, he prefers that support should go to NASA's unmanned planetary program and attempts at interstellar radio communication, two areas that he and Dr. Drake are deeply committed to at the moment. Considering the frustrations of UFO research, these aspects of the space program show the greatest promises of yielding the most significant advances in our understanding of the cosmos.

Philip Morrison takes his stand as the arch defender of the citadel of the scientific method. The validity of various phenomena and physical laws is established by observers using instruments. "From the point of view of drawing inferences about events, a witness is simply an extraordinarily subtle and complex instrument of observation." (p. 278) Thus, the recording of observations becomes critical, but so too does the manner and circumstances under which observations are made. "No witness is credible who bears a sufficiently strange story," (p. 282) because a witness is only one observation, and the existence of any strange phenomena, including UFOs, can be proved only by "independent and multiple chains of evidence, each capable of satisfying a link-by-link test of meaning." (p. 280) To date, no UFO observations have been able to pass this test. However, although not sympathetic to the ETH, he will always be "sympathetic to any positive effort to follow a link-by-link evidential chain" (p. 289) to identify the UFO phenomenon.

In summary, the book is a most valuable scientific medium which places two key papers, McDonald's and Menzel's, in proper context. Dr. McDonald argues the believers' case beautifully; Dr. Menzel argues the debunkers' case with mixed success. The other papers enrich our awareness of the complications of the issue, its various avenues of approach and the rigor they require, its legitimacy, and its value to science. This book will certainly be a classic, and probably the most widely referenced book on the subject for at least the coming decade.

UFO s And The Extraterrestrial Hypothesis

by Dr. Philip Seff

Dr. Seff is a consulting geologist in Redlands, California and is a Consultant to APRO in Geology.

Modern astronomers agree that of the hundreds of billions of planets existing in our universe, an estimated two to five billion of them could support life as we know it. Even if the greater percentage of these are discounted, one could hardly suggest that none of the planets on which conditions for life are adequate have included intelligent forms of life in their evolution. (We will ignore the possibility of life based on other than the carbon atom, because our imagination would stagger if we were to attempt to describe a day in some life "not as we know it.")

With our home planet as a known example, the quality essential for the evolution of thinking creatures who have harnessed flight has been four and one half billion years of time. Two and one half billion of those years were spent preparing the earth for habitation, and almost two billion more elapsed before the appearance of thinking creature about a million years ago. This does not suggest that the evolutionary rate is a constant because, as on our planet, it was determined by a unique combination of events. But an awareness of our earth's history does provide a referent by which to determine sequences, variables, and relative rates of change.

Although early man conceived of flying, and for over 2,000 years many of the principles of flight have been understood, it has been less than seventy years since the first manned heavier-than-air craft was flown successfully. In the spiralling technology of those few intervening years, we have been able to put men on the moon. It is difficult for us to imagine what stage of space travel we will have achieved a thousand years from now. But, certainly, the only limiting factor, according to our present scientific knowledge, is the speed of light.

In the vastness of space, it would take more than four years, at the rate of over 186,000 miles per second, to reach our nearest neighbor over seven trillion miles distant. As we reckon time, with our life span of about seventy

earthly revolutions around the sun, this becomes a serious obstacle facing interstellar travelers from the planet Earth. But travelers from other planets are not necessarily restricted by our seventy-year life span.

Accepting the hypothesis that there are many planets which support life as we know it, we would truly be audacious to impose our evolutionary rate and our concept of "time" on them. If they are thousands, or possibly even millions, of years ahead of us in evolution, and if their concept of "time" is ten or a hundred times ours, the hypothesis of an extra-terrestrial origin for UFOs does not seem too fantastic after all.

Symposium Proceedings

APRO urges all members to obtain *The Proceedings of the Eastern UFO Symposium* (held at Baltimore, Maryland on January 23, 1971), a new publication brought out by APRO and available at \$3.00 postpaid in the U.S., Canada and Mexico (\$3.50 all other countries). Please make checks payable to APRO.

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New Book By APRO Consultant

Dr. Robert S. Ellwood, APRO's Consultant in Religion, is the author of a new book published by Prentice-Hall. Entitled *Religious and Spiritual Groups in Modern America*, the book covers such topics as ceremonial magic, witchcraft, satanism, Rosicrucianism, Scientology, Hindu and Buddhist movements in the U.S. and much more.

Of particular interest to APRO members might be the chapter on UFO cults, which includes discussion on the Giant Rock Space Convention and several celebrated contactees and the religious motivations involved. The book is expected to become a classic textbook and it is believed that a paperback version will also be printed. No prices are known at this time but publication is scheduled for January, 1973. Interested parties may order the book through their local bookstores.

Dr. Ellwood, a specialist on far eastern religions and new religious movements in the United States, is an Associate Professor of Religion at the University of Southern California, Los Angeles.

Field Investigators' Procedures

The *Recommended Procedures for Field Investigators* (RPFI) which were issued this fall to APRO's Field Investigators has elicited considerable favorable comment. Many individuals have indicated that the thorough treatment of field investigation procedures was well worth the long wait.

Mr. and Mrs. Lorenzen followed the RPFI in their investigation of the Nogales incident (see Page 1) and although both participated in the preparation of the RPFI, they were happy to find that it was most useful in the investigation.

Mr. Donald Worley, long-time APRO investigator in Indiana has submitted an occupant report from several years back and followed the guidelines presented in the RPFI. The report, utilizing the new comprehensive report form and supplements, is unique and very detailed. It will be presented in a future issue.